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UBA1 Antibody

Rabbit mAb
Catalog # AP90948

Product Information

Application	WB, IHC, IF, FC, ICC, IHF
Primary Accession	P22314
Reactivity	Rat, Human, Mouse
Clonality	Monoclonal
Other Names	GXP1; MGC4781; POC20; GXP1; SMAX2; UBA1; UBE1;
Isotype	Rabbit IgG
Host	Rabbit
Calculated MW	117849

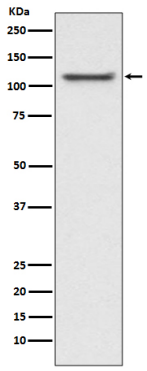
Additional Information

Dilution	WB 1:1000~1:2000 IHC 1:50~1:100 ICC/IF 1:50~1:200 FC 1:20
Purification	Affinity-chromatography
Immunogen	A synthesized peptide derived from human UBA1
Description	Catalyzes the first step in ubiquitin conjugation to mark cellular proteins for degradation through the ubiquitin-proteasome system. Activates ubiquitin by first adenylating its C-terminal glycine residue with ATP, and thereafter linking this residue to the side chain of a cysteine residue in E1, yielding a ubiquitin-E1 thioester and free AMP.
Storage Condition and Buffer	Rabbit IgG in phosphate buffered saline , pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol. Store at +4°C short term. Store at -20°C long term. Avoid freeze / thaw cycle.

Protein Information

Name	UBA1
Synonyms	A1S9T, UBE1
Function	Catalyzes the first step in ubiquitin conjugation to mark cellular proteins for degradation through the ubiquitin-proteasome system (PubMed:1447181, PubMed:1606621, PubMed:33108101). Activates ubiquitin by first adenylating its C-terminal glycine residue with ATP, and thereafter linking this residue to the side chain of a cysteine residue in E1, yielding a ubiquitin-E1 thioester and free AMP (PubMed:1447181). Essential for the formation of radiation-induced foci, timely DNA repair and for response to replication stress. Promotes the recruitment of TP53BP1 and BRCA1 at DNA damage sites (PubMed:22456334).
Cellular Location	Cytoplasm. Mitochondrion. Nucleus [Isoform 2]: Cytoplasm
Tissue Location	Detected in erythrocytes (at protein level). Ubiquitous.

Images



Western blot analysis of UBA1 expression in Jurkat cell lysate.